

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/985,780	YAMAMOTO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Henry N. Tran	2629	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment received 4/27/06.
2. ☒ The allowed claim(s) is/are 2-6, 10, 11, 14-18, 22 and 23; and are renumbered as 1-14.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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|--|--|
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date <u>1/18/06</u></li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
|--|--|

*Henry N. Tran*

**HENRY N. TRAN**  
**PRIMARY EXAMINER**

*5/10/06*

### **DETAILED ACTION**

1. The Amendment received 4/27/06 has been considered in preparing this Office action. Applicants' amendments to the claims and the Remarks/Arguments provided in page 8 of the Amendment have overcome the objections and/or the rejections recited in the prior Office action mailed 12/27/05.
2. Claims 2-6, 10, 11, 14-18, 22 and 23 remain pending in this application.

#### ***Information Disclosure Statement***

3. The examiner has considered the documents listed in form PTO-1449 submitted with the Information Disclosure Statement(s) (IDS) received (see the attached form PTO-1449).

#### ***Allowable Subject Matter***

4. Claims 2-6, 10, 11, 14-18, 22 and 23 are allowed; and are renumbered as 1-14.
5. The following is an examiner's statement of reasons for allowance:

The present invention is directed to a display apparatus and methods for displaying gradation scale images. The claimed invention of claims 2 and 14 require that: among  $n$  subfields of a frame, the subfields of  $B_n$  brightness and  $B_{n-1}$  brightness are arranged at an interval of about half a length of said frame, wherein subfields of  $B_{n-2}$  brightness and  $B_{n-3}$  brightness are arranged at an interval of about half a length of said frame so that each of the subfields of the  $B_{n-2}$  brightness and the  $B_{n-3}$  brightness is positioned almost at a midpoint between the two most brightness subfields  $B_n$  and  $B_{n-1}$  (see Fig. 14A); and the claimed invention of claims 5, 10, 17 and 22 require that: when a total number of the sustain pulses in a frame is varied, an original clock frequency is varied (see Fig. 16); whereas, the closest prior art,

Art Unit: 2629

the Shigeta patent (U.S. Patent No. 6,369,782), the Tanaka patent (U.S. Patent No. 6,552,701), and the Correa patent (U.S. Patent No. 6,714,250 which is EP 0 982 707 A1) require different subfields organizations and/ or changing the clock frequency, which does not teach or suggest the claimed invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

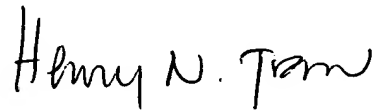
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. It is U.S. Patent No. 5,818,419 to Tajima et al, which teaches a display apparatus and methods for displaying gradation scale images by using different subfields configurations and/ or changing the clock frequency.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry N. Tran whose telephone number is 571-272-7760. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD A. HJERPE can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Henry N Tran  
Primary Examiner  
Art Unit 2629

HT 

5/10/06